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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/285,899    04/08/99    YAMAZAKI    S    0756-1950

MM92/0605  
SIXBEY, FRIEDMAN, LEEDOM & FERGUSON  
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MCLEAN VA 22102

EXAMINER

DUDEK, J

ART UNIT

PAPER NUMBER

2871

DATE MAILED:

06/05/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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# Office Action Summary

Application No.

09/285,899

Applicant(s)

YAMAZAKI ET AL.

Examiner

James A Dudek

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☐ Claim(s) 9-16, 21-24, 33-40, 45-48, 50-52 and 54-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16, 21-24, 33-40, 45-48, 50-52 and 54-56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 19.
- 18) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_.

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### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 103***

Claims 9-16, 21-24, 33-40, 45-48, 50-52, and 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inaba et al (5,227,900) in view of Takeshita et al (61-141174).

Inaba et al discloses the claimed invention except for the organic resin film leveling layer and the pixel electrode formed on top of the leveling layer. However, Takeshita et al teach that the usual way of forming a TFT is by forming a leveling layer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the leveling layer of Takeshita et al with the ferroelectric display of Inaba et al since, as taught by Inaba et al, this was well known.

Inaba et al discloses the claimed invention, as described above, except for the leveling layer formed on the second substrate. However, it was conventional to form a passivation layer (which would level the layer) on the second substrate to protect the color filters. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate a leveling layer on the second substrate in order to protect the color filters.

Inaba et al discloses the claimed invention, as described above, except for the television tuner. However, it was conventional to add a tuner to an LCD in order to display television images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a tuner to the display of Inaba et al in order to display television images.

It was conventions to add a light and lens projector.

Inaba et al discloses the claimed invention, as described above, except for the top gate structure. However, it was well known to substitute a top bottom gate TFT for a top gate TFT in the LCD art. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute a top gate TFT for the bottom gate TFT of Inaba et al, since it was a well known substitution.

#### ***Conclusion***

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Response to Arguments***

1. Applicant's arguments filed 7/6/00 have been fully considered but they are not persuasive. Applicant argues that "none of the applied references or Office Action's assertion of a "conventional technique teach or suggest this feature" is unclear. The fact that it is conventional or more importantly the factor that it is combined to protect the color filters suggest that feature. Furthermore, upper leveling film were well known and consistently level cell gap is the point of using leveling layers. It would be useless to provide a leveling layer on the lower surface while the upper surface is not level. That is, having only one leveling layer with a second non level surface would result in the in an inconsistent cell gap thickness throughout the cell.

Any inquiry concerning this communication should be directed to James A Dudek at telephone number (703) 308-4093.



James A Dudek  
Primary Examiner  
Art Unit 2871